



PTO/SB/08a/b (08-03)

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Substitute for form 1449A/B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Complete If Known	
				Application Number	10/643747
				Filing Date	August 18, 2003
				First Named Inventor	Mark A. Reed
				Art Unit	2811 1626
				Examiner Name	Not Yet Assigned <i>Ka Saeul</i>
Sheet	1	of	1	Attorney Docket Number	YU-P07-002

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	AA				

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ -Number-Kind Code ⁵ (if known)				
<i>KS</i>	BA	EP 0 268 370 A	25. 05.1988	(CANON KK)	page 14 line 37- line 41 figure 7	

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NON PATENT LITERATURE DOCUMENTS			
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<i>KS</i>	CA	ZHOU, C. et al. "Nanoscale Metal/Self-Assembled Monolayer/Metal Heterostructures" Applied Physics Letters, American Institute of Physics, New York, US, Vol.71, No.5, 4 August 1997, pages 611-613.	
<i>KS</i>	CB	SCHUMM, J. S. et al. "Potential Molecular Wires And Molecular Alligator Clips" Nanotechnology, Institute of Physics, GB, Vol.7, No.4, December 1996, pages 430-433.	
<i>KS</i>	CC	DATTA, S. et al. "Molecular Ribbons" Semiconductor Science And Technology, Institute of Physics, London, GB, Vol.13, No.12, 1 December 1998, pages 1347-1353.	

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Examiner Signature	<i>Kamel Saeul</i>	Date Considered	02/17/05
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PTO/SB/08A (10-01)

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	10/643747
				Filing Date	August 18, 2003
				First Named Inventor	Mark A. Reed
				Art Unit	2844-1626
				Examiner Name	Not Yet Assigned Saeed
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U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No.†	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code² (if known)			
E	AA	4,581,621	04-1986	Reed	
	AB	4,751,194	06-1988	Cibert et al.	
	AC	4,769,683	09-1988	Goronkin et al.	
	AD	4,783,427	11-1988	Reed et al.	
	AE	4,799,091	01-1989	Reed	
	AF	4,803,173	02-1989	Sill et al.	
	AG	4,835,578	05-1989	Ohtoshi et al.	
	AH	4,860,064	08-1989	Luryi	
	AI	4,894,526	01-1990	Bethea et al.	
	AJ	4,902,912	02-1990	Capasso et al.	
	AK	4,903,101	02-1990	Maserjian	
	AL	4,992,388	02-1991	Pfiester	
	AM	4,999,682	03-1991	Xu et al.	
	AN	5,006,911	04-1991	Sivan	
	AO	5,013,683	05-1991	Petroff et al.	
	AP	5,026,894	06-1991	Tour et al.	
	AQ	5,032,877	07-1991	Bate	
	AR	5,036,371	07-1991	Schwartz	
	AS	5,047,355	09-1991	Huber et al.	
	AT	5,059,695	10-1991	Tour et al.	
	AU	5,073,893	12-1991	Kondou	
	AV	5,093,699	03-1992	Weichold et al.	
	AW	5,105,232	04-1992	de Alamo et al.	
	AX	5,107,316	04-1992	Jelley et al.	
	AY	5,114,877	05-1992	Paoli et al.	
	AZ	5,126,804	06-1992	Nagai et al.	
	BA	5,130,762	07-1992	Kulick	
	BB	5,138,408	08-1992	Ando	
	BC	5,138,625	08-1992	Paoli et al.	
	BD	5,142,641	08-1992	Fujioka	
	BE	5,144,580	09-1992	Niu et al.	
	BF	5,153,687	10-1992	Ishikawa et al.	
	BG	5,160,992	11-1992	Gerard et al.	
	BH	5,170,226	12-1992	Fukuzawa et al.	
	BI	5,175,740	12-1992	Elman et al.	
	BJ	5,191,784	03-1993	Jelley et al.	
	BK	5,200,969	04-1993	Paoli	
	BL	5,202,290	04-1993	Moskovits	
F	BM	5,214,664	05-1993	Paoli	

Examiner Signature	Samal Saeed	Date Considered	02/17/05
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OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
CS	BN	Callahan et al. The Tertiary Butyl Group as a Blocking Agent for Hydroxyl, Sulfhydryl and Amido Functions in Peptide Synthesis, p. 201-207 (10 Jan. 1963).	
	BO	Farazdel et al. Electric Field Induced Intramolecular Electron Transfer in Spiro π -Electron Systems and Their Suitability. J. Am. Chem. Soc. 112, 4206-4214 (1990).	
	BP	Hush et al. Electron and Energy Transfer Through Bridged Systems. 6. Molecular Switches: The Critical Field. J. Am. Chem. Soc. 112, 4192-4197 (1990).	
	BQ	IBM Technical Disclosure Bulletin, vol. 31, No. 9 (Feb. 1989).	
	BR	Kenny et al. Synthesis of Molecular Lines, Rigid Linear Molecules with Nanometer Scale Dimensions. J. Chem. Soc., Chem. Commun. 84-85 (1988).	
	BS	Miller. Molecular Electronics? Adv. Mater. 2, 378-379, 492-497, 601-603 (1990).	
	BT	Nishimura et al. New Method for Removing the S-p-Methoxybenzyl and S-t-Butyl Groups of Cysteine Residues with Mercuric Trifluoroacetate. Chem. Pharm. Bull. 26, 1576-1585 (1978).	
	BU	Sonogashira et al. A Convenient Synthesis of Acetylenes: Catalytic Substitutions of Acetylenic Hydrogen with Bromalkenes, Iodoarenes, and Bromophyridines. Tetrahedron Letters 4467-4470 (1975).	
	BV	Stephens. "A Synthesis of Tolanes and Heterocyclics" in The Substitution of Aryl Iodides with Cuprous Acetylides, p.3313-3315 (Dec. 1963).	
	BW	Stille. Palladium catalyzed coupling of organotin reagents with organic electrophiles. Pure & Appl. Chem. 57, 1771-1780 (1985).	
KS	BX	Stille. The Palladium-Catalyzed Cross-Coupling Reactions of Organotin Reagents with Organic Electrophiles. Angew. Chem. Int. Ed. Engl. 25, 508-524 (1986).	

Examiner Signature	Kamal Saeed	Date Considered	02/17/05
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		Filing Date	August 18, 2003		
		First Named Inventor	Mark A. Reed		
		Art Unit	2844 1622		
		Examiner Name	Not Yet Assigned Saeed		
Sheet	3	of	3	Attorney Docket Number	YU-P07-002

ES	BY	Suffert et al. Towards Molecular Electronics: A New Family of Aromatic Polymine Chelates Substituted with Alkyne Groups. Tetrahedron Letters 32, 757-760 (1991).	
	BZ	Tour et al. Approaches to Orthogonally Fused Conducting Polymers for Molecular Electronics. Am. Chem. Soc. 5662-5663 (4 July 1990).	
	CA	Tour et al. Extended Orthogonally Fused Conducting Oligomers for Molecular Electronic Devices. Am. Chem. Soc. 7064-7066 (28 Aug. 1991).	
	CB	Tour et al. Synthesis and UV-Visible Properties of Soluble alpha-Thiophene Oligomers. Monomer to Octamer. Am. Chem. Soc. 1901-1907 (30 March 1992).	
	CC	Yoshimura et al. Quantum Wire and dot formation by chemical vapor deposition and molecular layer deposition of one-dimensional conjugated polymer. Am. Inst. Physics 268-270 (20 Jan. 1992).	
ES	CD	Zecevic et al. Spectroscopic and Electrochemical Studies of Transition Metal Tetrasulfonated Phthalocyanines. J. Electroanal. Chem. 196, 339-358 (1985).	

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